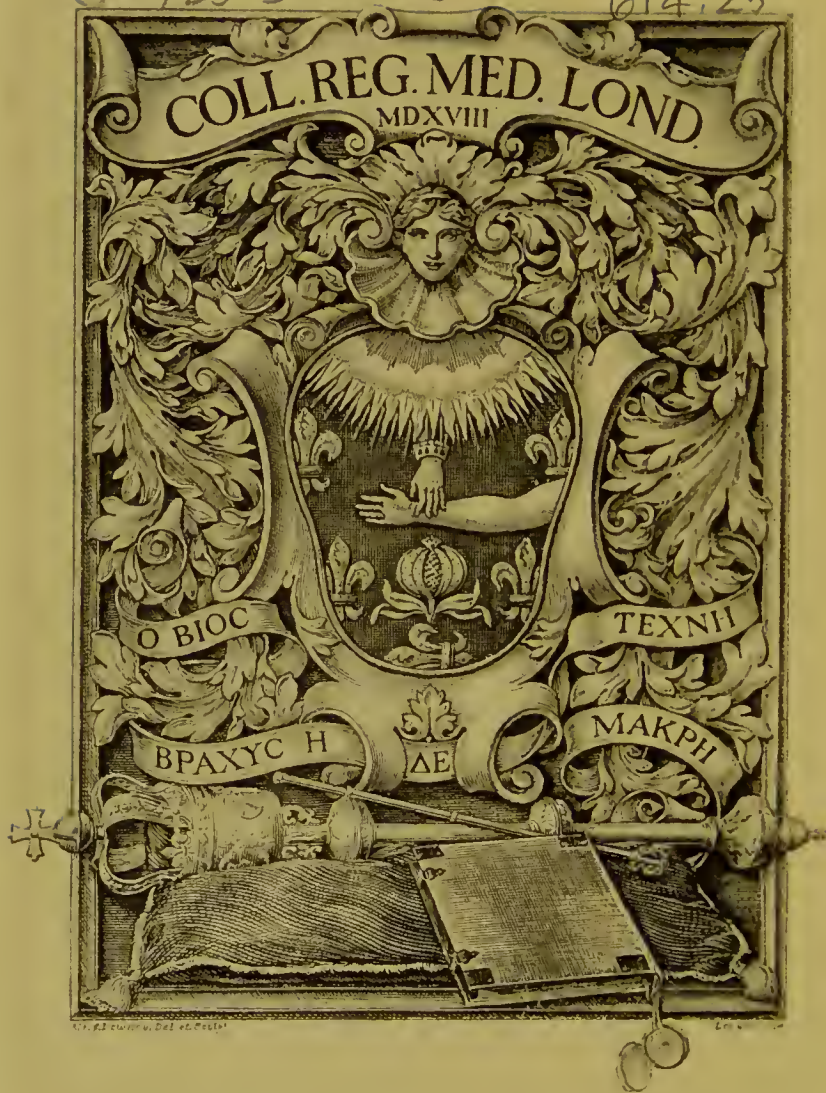
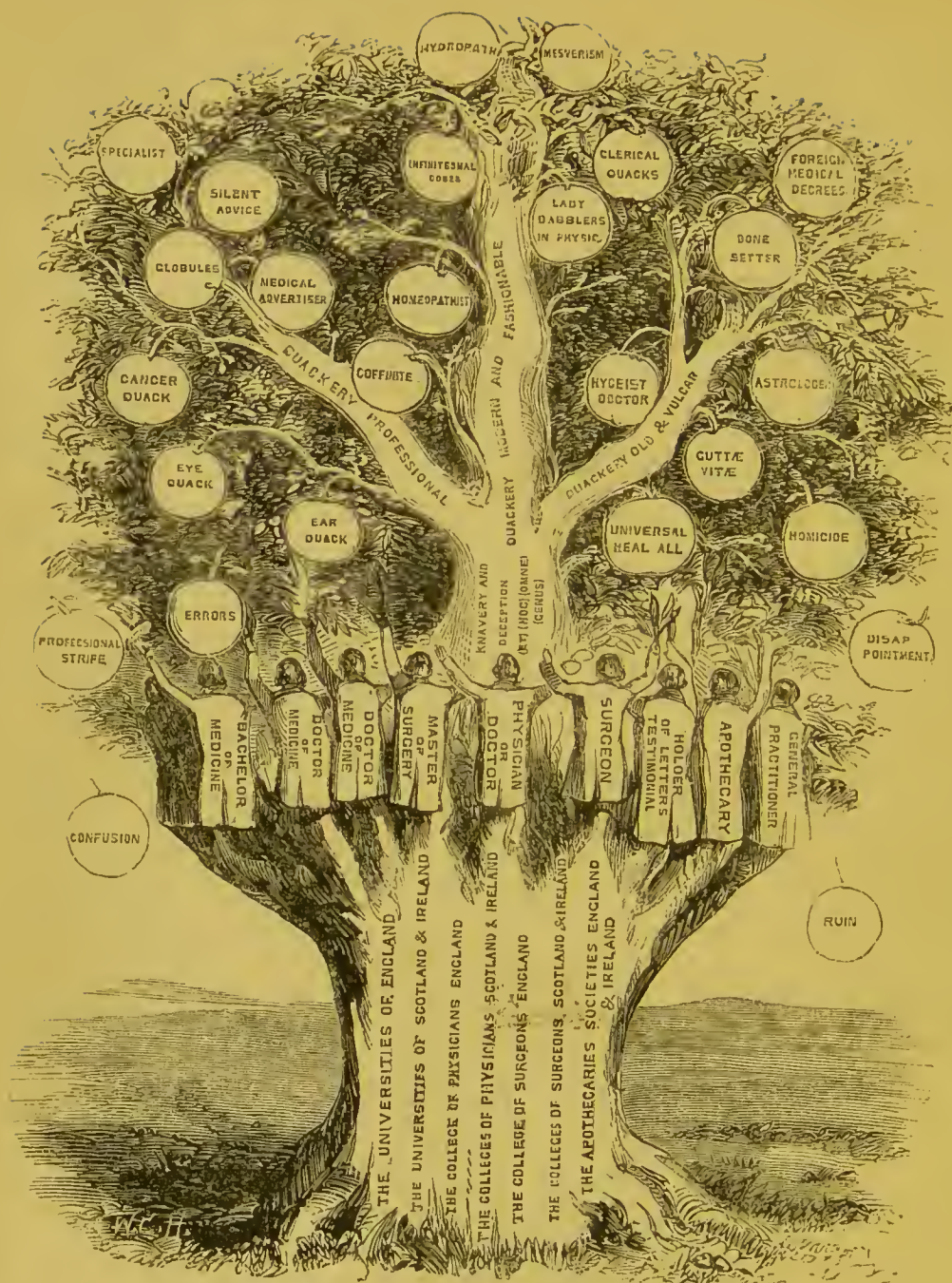


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THE "UPAS" OF THE MEDICAL PROFESSION.

"The appellations, 'Doctor,' 'Surgeon,' &c., are not distinctive of qualification, and hence the land is filled with Charlatans and Impostors. In England, we have in practice men holding Foreign Diplomas, which may be purchased for a few pounds, and a certain amount of false swearing. We have men practising without diplomas as Homœopaths, Hydropaths, Prescribing Druggists, &c. We have Specialists, as Aurists, Oculists, Cancer-curers, &c.,—all known to, and employed by, the public as 'Doctors.'"—*Vide pp. 20, 21.*

THE PRESENT STATE
OF THE
Medical Profession
IN
Great Britain and Ireland,
WITH REMARKS ON
The Preliminary and Moral Education
OF
MEDICAL AND SURGICAL STUDENTS:

A BOOK THAT WILL BE FOUND HELPFUL TO MEDICAL STUDENTS,
AND THE PARENTS AND GUARDIANS OF YOUNG MEN, AND OF
GENERAL INTEREST TO THE MEMBERS OF THE MEDICAL
PROFESSION.

BY

WILLIAM DALE,
M.R.C.S.; L.S.A.; ~~Undergraduate~~ of the London University, &c.

“The most sublime vocation of men, after the service of the Deity, is that of being priest of the holy vital flame, and an administrator of God’s highest gifts, and of the most secret powers of Nature—in one word, a Physician.”—*Hufeland.*

LONDON:

A. W. BENNETT, 5, BISHOPSGATE WITHOUT.

PLYMOUTH: ISAIAH W. N. KEYS, 46, BEDFORD STREET; AND JAMES
SELICK, 28, WHIMPLE STREET;
And all Booksellers.

1860.

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Preface.

THE Author has had the idea of a work like the present in his mind for some time ; but, probably, the execution of it would have been long deferred had not the “ Carmichael Prizes,” offered for competition by the Council of the Royal College of Surgeons in Ireland, proved the stimulus to its immediate production.

The work is the fruit, mainly, of early rising—of hours snatched from sleep, and has cost considerable thought and labour, which, however, have not been bestowed upon it grudgingly, for, in seeking his materials, the Author has had his own knowledge considerably enlarged, and therefore his task has been a pleasing one.

Originally, the Author wrote for the above-mentioned Prizes offered during this year, but his attempt was unsuccessful, inasmuch as no prizes were awarded by the adjudicators. Two considerations, however, have led him to give “ utterance to his thoughts ” through the press ;—the one being that he was unwilling that the labour of his hands, which was undertaken and executed with due care and earnestness, should be altogether in vain ; and the other, his belief that the work he has produced will be found highly useful to those interested in the subjects on which it treats.

The reader will not fail to notice that the medical

profession has been examined, principally, as it exists at the present time in England,—or rather that the *point of view* of the subject is to some extent English—and therefore the title of the work may seem to be an ill-chosen one. The Author would anticipate adverse criticism as to this fact by observing that, although he has used every means within his reach to secure correctness in the statements he has made concerning the state of the medical profession, schools of medicine, &c., in Scotland and Ireland—as well as in England—yet he is fully conscious of many deficiencies, and which he hopes, at some future period, he shall be able to supply.

The blank leaves which will be found at the end have been added for the purpose of enabling the purchaser to record any alterations which may be made from time to time by the various educational and examining bodies. If such alterations are noted as they are observed, it is thought that the work may prove on many points a trustworthy guide to the medical profession for many years to come.

Finally, it may be proper to add that, although in many instances the Author has consulted the archives of the different colleges and schools of medicine for himself, yet, for much information herein contained respecting curricula, examinations, expenses of medical education, &c., he is indebted to the medical periodicals of the day; and to the editors of which he begs respectfully to acknowledge his obligations.

Plymouth, Devon, October 31, 1859.



THE MEDICAL PROFESSION

IN
GREAT BRITAIN AND IRELAND.



F the continuous outcry for legislation which has been heard of late, and the various schemes which have been proposed for improving the medical profession, may be viewed as proofs of its present state, then it must indeed be desperate. But although this profession is not, in several respects, all that can be desired, nevertheless its defects have been greatly exaggerated, both by its friends and enemies, who, between them, have represented it to be beyond help or hope. But this is an extreme view, after the fault-finding manner of this age, and quite unwarranted by the facts of the case. In the following pages an attempt will be made to give an impartial consideration to the evils which we believe to exist—First, In the state of the medical profession, in its different departments of physic, surgery, and pharmacy, in Great Britain and Ireland: secondly, In the state of the hospitals and schools of medicine, surgery, and pharmacy: and
B thirdly,

thirdly, In the state and mode of testing the qualifications of candidates of the different licensing colleges or corporations in medicine, surgery, and pharmacy. And as we proceed, such suggestions will be offered as may occur to us, “respecting the improvement of the profession, with the view of rendering it more useful to the public, and a more respectable body than it is at present:” and, should we be unsuccessful in the primary object of the Essay, we shall not fail to obtain some reward for our pains, in the consciousness that we have earnestly endeavoured to benefit a most noble and useful profession.

I. THE STATE OF THE MEDICAL PROFESSION, IN ITS DIFFERENT DEPARTMENTS OF PHYSIC, SURGERY, AND PHARMACY, IN GREAT BRITAIN AND IRELAND.

In this place we observe, that the great evil to be noted is *the number and differences of the institutions which exist for granting licenses and degrees*, giving rise to unequal qualifications, a multiplicity of titles, and consequent errors and mistakes. We find there are upwards of twenty institutions for granting degrees, licenses, &c. *In England*—We have the University of Cambridge, the University of Oxford, the University of London, the University of Durham, the Royal College of Physicians, London, the Royal College of Surgeons, London, the Society of Apothecaries, London.

In Scotland.—The University of Edinburgh, the University of Glasgow, the University of Aberdeen; Marischal College and University, Aberdeen; the University of St. Andrew's, the Royal College of Physicians, Edinburgh; the Royal College of Surgeons, Edinburgh; the Faculty of Physicians and Surgeons of Glasgow.

In Ireland.—The University of Dublin, Queen's University

verfity in Ireland, the King and Queen's College of Phyficians, the Royal College of Surgeons, Dublin, the Apothecaries' Hall of Ireland. And, in addition to thefe, we have the Lambeth Diploma, granted by the Archbishop of Canterbury. All the above-named intitutions have a legal right to grant degrees, licenses, &c., and hence there are nearly as many defignations for legally qualified medical men as there are intitutions for testing their qualifications. They are named Bachelors of Medicine, Doctors of Medicine, Masters of Surgery, Licentiates in Medicine and Surgery, Extra-Licentiates in Medicine, Licentiates in Midwifery, Fellows of Colleges, Members of Colleges, Surgeons, Holders of Letters Testimonial, and Holders of Certificates of Fitnefs for the Army and Navy.

A brief review of the preliminary education required of candidates by thefe intitutions will fhew that the members of the medical profeffion, bearing one or other of the above defignations, muft be *unequally qualified*, and to this end we muft glance at the intitutions in turn ; and for the fake of brevity, and to avoid repetition, we fhall group them together as much as poffible, in the following manner. Firft:—

THE UNIVERSITY OF LONDON.

THE UNIVERSITY OF OXFORD.

THE UNIVERSITY OF CAMBRIDGE.

THE UNIVERSITY OF DUBLIN.

THE QUEEN'S UNIVERSITY IN IRELAND.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

We fhall confider the University of London as representative of the above-named intitutions, becaufe its regulations are more intelligible to general readers.

The curriculum* extends over a period of five or six years, and including matriculation (which is required by all of them), is generally as follows:—

a. Matriculation.—Classics, the English language, English history and modern geography, mathematics and natural philosophy, chemistry, either the French or German language.

b. Bachelor of Medicine.—First Examination. No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—

1st. Of having completed his nineteenth year.

2nd. Of having taken a degree in arts in the university, or in a university, the degrees granted by which are recognised by the Senate of the university, or of having passed the matriculation examination.

3rd. Of having been a student during two years at one or more of the medical institutions or schools recognised by the university, subsequently to having taken a degree in arts, or passed the matriculation examination.

4th. Of having attended a course of lectures on each of four of the subjects in the following list:—

Descriptive and Surgical Anatomy.

General Anatomy and Physiology.

Comparative

* The main difference between the University of London and the Universities of Oxford and Cambridge, &c., as it respects education, consists in this, that the latter require the candidate to pursue his studies at the university, or at least at some university,—as by residence for a specified period, by attendance on the lectures of the professors, &c.—while the former allows him to make his choice from numerous recognised schools and colleges. (*Vide* London University Calendar.) Moreover, the University of Oxford, the University of Dublin, the Queen's University in Ireland, and the King and Queen's College of Physicians in Ireland, require the candidate for the degrees in medicine to have *graduated* in arts; or, at least, to undergo the same examination as that appointed for Bachelors of Arts.

Comparative Anatomy.

Chemistry.

Botany.

Materia Medica and Pharmacy.

General Pathology.

General Therapeutics.

Forensic Medicine. Hygiene.

Midwifery, and Diseases peculiar to Women and Infants.

Surgery. Medicine.

5th. Of having dissected during nine months.

6th. Of having attended a course of practical chemistry, comprehending practical exercises in conducting the more important processes of general and pharmaceutical chemistry; in applying tests for discovering the adulteration of articles of the materia medica, and the presence and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c.

7th. Of having attended to practical pharmacy during a sufficient length of time to enable him to acquire a practical knowledge in the preparation of medicines.

Second Examination.—No candidate shall be admitted to this examination within two academical years of the time of his passing the first examination, nor unless he have produced certificates to the following effect :—

1st. Of having passed the first examination.

2nd. Of having, subsequently to having passed the first examination, attended a course of lectures on each of two of the subjects comprehended in the list (pp. 4, 5), and for which the candidate had not presented certificates at the first examination.

3rd.

3rd. Of having, subsequently to having passed the first examination, dissected during six months.

4th. Of having conducted at least six labours.

5th. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months, and lectures on clinical surgery.

6th. Of having attended the medical practice of a recognised hospital or hospitals during *other* twelve months, and lectures on clinical medicine.

7th. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to practical medicine in a recognised hospital, infirmary, or dispensary, during six months.

c. Doctor of Medicine.—No candidate shall be admitted to this examination unless he have produced certificates to the following effect:—

1st. Of having taken the degree of Bachelor of Medicine.

2nd. Of having attended, subsequently to having taken this degree—

a. To clinical or practical medicine during two years, in a hospital or medical institution recognised by the university.

b. Or, to clinical or practical medicine during one year in a hospital or medical institution recognised by the university, and of having been engaged during three years in the practice of his profession.

c. Or, after taking the degree of Bachelor of Medicine, of having been engaged during five years in the practice of his profession.

3rd. Of moral character, signed by two persons of respectability.

4th.

4th. The education must include the elements of intellectual philosophy, logic, and moral philosophy, in addition to the above-named subjects.*

II.—THE UNIVERSITY OF EDINBURGH.

THE UNIVERSITY OF GLASGOW.

THE UNIVERSITY OF DURHAM, ENGLAND.

UNIVERSITY AND KING'S COLLEGE, ABERDEEN.

MARISCHAL COLLEGE AND UNIVERSITY OF
ABERDEEN.

UNIVERSITY OF ST. ANDREW'S.

The curriculum extends over a period of four years, and comprehends the usual subjects of medical education. Matriculation is not required, although the University of St. Andrew's requires the candidate to produce a certificate to the effect that he has had a liberal and classical education; and all of them require a competent knowledge of Latin. The University of Edinburgh requires that the studies shall have been pursued for one year in the university, and the rest in some university where the degree of M.D. is given. It grants the degree of M.D. only. The Universities of Glasgow and Aberdeen require that one year of study be passed in the respective universities. The former grants the degrees of Master in Surgery and Doctor of Medicine; the latter, the degrees of Bachelor and Doctor of Medicine. The University of St. Andrew's grants the degree of Doctor of Medicine only. The University of Durham requires the studies to be directed to religion, literature, and science, during

* This university has a wise and considerate bye-law respecting medical men who have been in practice several years, or who commenced their studies previously to the year 1835, and whose medical education has not been altogether in accordance with the regulations stated above.

during the first year in the university, and grants the degree of Bachelor of Medicine and Doctor of Medicine.

III.—ROYAL COLLEGE OF PHYSICIANS, LONDON.

No one will be admitted as a candidate for the license or extra license unless he shall have attained the age of six-and-twenty, and shall present a certificate of good moral conduct. The medical education must comprise anatomy, the theory and practice of medicine, forensic medicine, chemistry, materia medica, natural history (particularly botany), midwifery, the principles of surgery, and must extend over a period of *five years*. Practical medicine must be studied for three years in a hospital containing at least one hundred beds, and having a complete staff of physicians and surgeons. Those who have studied abroad, in addition to giving proof of five years' medical education according to the usual course of study, are required to present testimonials of a twelve months' attendance on medical practice at any hospital in Great Britain having the qualifications as above. A competent knowledge of Latin is indispensable, for the examinations are conducted in Latin or English, at the pleasure of the censors.*

Persons who have attained their fortieth year seeking to become licentiates of the college, but whose medical education is not altogether in accordance with the regulations
already

* During what has been called the "Year of Grace," which began on March 1st, 1859, and will end on March 1st, 1860, certain medical practitioners, as Doctors of Medicine of British or Foreign Universities, and Bachelors of Medicine of the Universities of Oxford, Cambridge, London, and Dublin, and who shall not be engaged in the practice of pharmacy, may be admitted licentiates of the college *without any examination* on payment of ten guineas.—*Vide Bye-Laws, dated Feb. 16, 1859.*

already stated, must present very high testimonials of professional knowledge and good moral conduct; and if these are satisfactory to the censors, after a very strict scrutiny, the censors may recommend to the college that they should be admitted to examination, the same as for licentiates in general.

IV. ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

No one can be a fellow of the college till he has obtained the degree of Doctor of Medicine. Graduates of British universities are admitted without any previous trial or examination; but graduates of foreign universities must previously submit to an examination before the examiners of the college. It grants a resident and a non-resident fellowship.*

V. ROYAL COLLEGE OF SURGEONS OF ENGLAND.

a. For Members of the College.—Preliminary education. No preliminary education has been required to the present time; but the recent regulations state that “it is the intention of the Council to institute an examination, or to require some equivalent evidence of the candidate’s proficiency in the ordinary branches of a liberal education.” The following certificates are required:—

1. Of being twenty-one years of age.

2. Of

* This corporation also has its “Year of Grace,” which commenced on April 20th, 1859, and during which licentiates of any of the existing licensing Boards may be admitted licentiates of the college, *after due examination*, provided that they do not derive any profit from the sale of drugs or medicines, and that they produce certificates of character and professional qualification satisfactory to the college, and on payment of ten pounds. The College of Physicians in Ireland is not *behind the times*; it also has proclaimed a “Year of Grace.”

2. Of having been engaged during *four years* in the acquirement of professional knowledge.

3. Of having studied practical pharmacy during three months.

4. Of having attended lectures on anatomy, delivered not less frequently than four times in each week, during two winter sessions.

5. Of having performed dissections during not less than two winter sessions.

6. Of having attended lectures on physiology, delivered not less frequently than twice in each week, during two winter sessions.

7. Of having attended lectures on surgery during two winter sessions.

8. Of having attended one course of lectures on each of the following subjects, viz., chemistry, materia medica, medicine, and midwifery.

9. Of having attended, at a recognised hospital or hospitals in the United Kingdom, the practice of medicine, and clinical lectures on medicine, during one winter* and one summer† session.

10. Of having attended, at a recognised hospital or hospitals in the United Kingdom, the practice of surgery, and clinical lectures on surgery, during three winter and two summer sessions.

No provincial hospital will be recognised by the college
which

* The winter session comprises a period of six months, and, in England, commences on the 1st of October, and terminates on the 31st of March.

† The summer session comprises a period of three months, and, in England, commences on the 1st of May, and terminates on the 31st of July.

which contains less than one hundred patients; and no metropolitan hospital which contains less than one hundred and fifty patients.*

b. Admission of Members to the Fellowship.—The candidates must produce certificates—

1st. That he is twenty-five years of age.

2nd. Of moral character, &c., signed by three fellows.

3rd. That he has passed a preliminary examination in classics, mathematics, and French, appointed by the Council.

4th. That he has been engaged for six years in the acquirement of professional knowledge in recognised hospitals or schools; and that not less than three winter and three summer sessions thereof have been passed in one or more of such hospitals in London.

5th. That he has studied anatomy and physiology by demonstrations, dissections, &c., during three winter sessions.

6th. That he has attended lectures on the theory and practice of medicine, and on clinical medicine; and also on the theory and practice of surgery, and on clinical surgery, during two winter sessions.

7th. That he has attended one course of lectures on the following subjects, viz., Chemistry, materia medica, midwifery (with attendance on cases), medical jurisprudence, and comparative anatomy.

8th. That he has served the office of house-surgeon or dresser in a recognised hospital in the United Kingdom.

9th. That he has attended the surgical practice of a recognised

* Provision is made for candidates who have pursued their studies in Scotland or Ireland; and also for the recognition of colonial hospitals and schools.—*Regulations, June 10th, 1858.*

nised hospital or hospitals during four winter and four summer sessions; and the medical practice of a recognised hospital or hospitals during one winter and one summer session.

10th. He is also required to present clinical reports, with observations thereon, of not less than six surgical cases, taken by himself at one or more recognised hospital or hospitals, with satisfactory evidence of their authenticity and genuineness.

11th. A Bachelor or Master of Arts of any university in the United Kingdom requires five years' professional study instead of six.

12th. Any person who was a member of the college on the 4th day of September, 1844, will be admitted to examination on the production of a certificate, signed by three fellows, that he has been *eight* years in the practice of the profession of surgery, and that he is a fit and proper person to be admitted a fellow.

13th. Any person who has become a member after the 14th day of September, 1844, will, after the expiration of *twelve* years from the date of the diploma, be admitted to the examination, upon the production of a certificate, signed by three members, that he has been twelve years in the practice of the profession of surgery, and that he is a fit and proper person to be admitted a fellow.

c. Certificate in Midwifery.—The college grants this certificate, after a suitable examination, to its own members, and to persons producing any diploma or degree which may be considered by the Council satisfactory proof of sufficient surgical and medical education.

VI. ROYAL COLLEGE OF SURGEONS, IRELAND.

*a. Letters Testimonial.**

1. Latin and Greek languages.
2. Four years' professional study, three of which shall have been passed in attendance on lectures or hospitals in Dublin, London, Edinburgh, or Glasgow.
3. Hospital practice, with clinical instruction, during three years.
4. Candidates who shall have attended metropolitan hospitals three winter sessions of six months each, and a like number of months at a provincial surgical hospital, shall be considered to have performed sufficient hospital attendance.
5. The courses of lectures, &c., required are as under :—

Anatomy and Physiology. . . .	Three courses.
Theory and Practice of Surgery. . . .	Three courses.
Dissections, accompanied by Demonstrations	Three courses.
Chemistry	Two courses.
Or, Practical Chemistry and General Chemistry	One course.
Materia Medica	One course.
Practice of Medicine	One course.
Midwifery	One course.
Medical Jurisprudence	One course

b. For the Fellowship.

1. A certificate that the candidate is twenty-five years of age.
 2. That he has obtained a liberal preliminary education, or is Bachelor of Arts of some university.
 3. A certificate
-

* The title Holder of Letters Testimonial is equivalent to the titles Member and Licentiate of other institutions.

3. A certificate of good general conduct, signed by two or more members of the college.

4. Certificates that he has been engaged in the acquisition of professional knowledge for a period of not less than six years, during three of which he must have studied in one or more of the schools or hospitals of Dublin recognised by the Council. He may have studied for the other three years in any school or schools of the United Kingdom which shall be approved by the Council, or in any foreign school of repute. It is also required that the candidate should have had opportunities of practical instruction as house-surgeon or dresser in a recognised hospital.

5. Certificates of attendance on the several courses of lectures required to be attended by candidates for Letters Testimonial, together with one course of lectures on comparative anatomy, one course of lectures on botany, and one on natural philosophy.

6. A thesis on some medical subject; or clinical report, with observations, of six or more medical or surgical cases, taken by himself.

7. Licentiates of the college (*id est*, holders of Letters Testimonial), who may not be able to show that they have followed the course of study specified in the preceding regulations, may, at the expiration of ten years from the date of their diploma, be admitted to the examination required for the fellowship, provided they produce such evidence as shall be satisfactory to the Council that they have conducted themselves honourably in the practice of their profession.

c. For Diploma in Midwifery.

Any fellow or licentiate of the college is eligible, and the following certificates are required :—

1. A certificate of six months' attendance on a course
of

of lectures on midwifery and diseases of women and children, delivered by a professor or lecturer in some school of medicine or surgery recognised by the Council.

2. A certificate of six months' attendance on the practice of a lying-in hospital, or dispensary for lying-in women and children, recognised by the Council, and devoted to this branch of surgery alone.

3. A certificate showing that he has conducted thirty labour cases at least.

VII. ROYAL COLLEGE OF SURGEONS, EDINBURGH.

Preliminary Instruction.

Elements of mathematics, a course of sixty lectures on mechanical philosophy, and the Latin language.

1. The professional instruction extends over a period of three years, and embraces the usual subjects, including military surgery ; but a fourth year's study is recommended.

2. Hospital practice for twenty-one months.

3. The candidate must likewise attend a course of instruction in *practical pharmacy*, at the laboratory of a surgeon or apothecary, or of a chemist or druggist recognised by the college on special application, or of a public hospital or dispensary ; and he must produce evidence that he has been engaged in compounding and dispensing medicines for the space of six months. Those who produce a certificate of having been, for the space of at least two years, private pupils or apprentices to regularly licensed medical practitioners, keeping laboratories for dispensing medicines, shall be held qualified in this branch of instruction.

4. The college strongly recommend to students to avail themselves of any opportunities which they may possess of attending lectures on botany, natural history, or natural science,

science, comparative anatomy, and pathological anatomy, in addition to the courses of lectures which are absolutely required by the above regulations.

VIII. FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.

The regulations of this institution are similar to those of the College of Surgeons, Edinburgh. It grants a license, and holds the same place in point of law as the other Colleges of Surgeons.

IX. APOTHECARIES' HALL, ENGLAND—APOTHECARIES' HALL, IRELAND.

1. A certificate of having passed a preliminary examination in classics and mathematics.*

2. A certificate of having served an apprenticeship of not less than five years to a qualified practitioner.

3. A certificate of having attained the age of twenty-one, and of good moral conduct.

4. Attendance on the usual courses of lectures during three winter and two summer sessions, with dissections.

5. Medical practice during the full term of eighteen months—twelve months at an hospital connected with a recognised medical school, and six months either at a recognised hospital or dispensary, if more convenient.†

The only difference of any moment between the two institutions is in hospital practice. The Apothecaries' Hall in England requires only eighteen months' medical practice; but

* This examination has been optional, as it respects the English apothecaries; but hereafter it will be compulsory on all who commence their professional studies on or after August 1, 1858.

† Regulations of Apothecaries' Hall, London, June, 1858.

but the Apothecaries' Hall in Ireland requires two years' medical and surgical practice.

X. NAVY MEDICAL DEPARTMENT. ARMY MEDICAL DEPARTMENT.

EAST INDIA COMPANY'S MEDICAL SERVICE.

All these require—

1. A diploma in surgery, or a degree in medicine, provided an examination in surgery be required for such degree from some body competent by law to grant or confer such diploma or degree.

2. Certificates of attendance on lectures comprising the usual subjects.

3. Certificate of moral character, and of a classical or liberal preliminary education.

In the regulations of the Army Medical Department it is observed, "The greater the attainments of the candidates, the more eligible will they subsequently be deemed for promotion; as selections to fill vacancies, especially in the higher ranks, will be guided more by reference to such acquirements, than to mere seniority."

The Army and Navy Medical Departments require a six months' course of lectures on military surgery; and the East India Company's Service requires some attention to have been paid to natural history and comparative anatomy. In other respects, the regulations of the three institutions are similar.

It will be seen from this summary that, as it respects surgery and physic, the preliminary education of candidates required by the licensing bodies in Great Britain and Ireland, with scarcely an exception, is ample and sufficient. In this

respect, the good old times of our forefathers are not to be compared to the present ; and diplomas cannot now be bought for money, without study and without some test of fitness. We should rather say too much is required than too little, and especially by the universities ; and it is worthy of inquiry and consideration whether the subjects which are taught, some of them called collateral, are not too numerous and diversified, and whether they do indeed make more efficient medical men. Whether, in other words, the various studies and exercises for the degrees in arts might not be dispensed with, or greatly abridged, and the time more usefully employed by the students in medicine ; and whether such preliminary study is not exacted partly for the sake of upholding and supporting these institutions. It is not necessary, however, to dwell on this point here, as it will come under consideration further on, when we speak of the general preliminary education of young men who intend to follow the medical profession. We go on to observe, that the evil does not spring from these institutions being lax and indifferent as to the education of candidates for the degree or license which they grant, but in their number and the differences which exist among them, giving rise, as we have already said, to *unequal qualifications* and a *multiplicity of titles*.

This evil may be considered, first, as it respects the students of medicine ; secondly, as it respects medical men themselves ; and thirdly, as it respects the community at large.

This multiplicity of institutions for the granting of medical licenses, &c., is an evil *as it respects the student*, inasmuch as he cannot but be at a loss to know what “ curriculum ” he should pursue, or to what examining Board he should present himself at the termination of his studies, so that he may take a respectable position in the professional “ corps ; ” for very few

few young men have friends or guardians who are sufficiently acquainted with this matter to afford them the necessary information, or to guide them aright.

The writer speaks here from experience, for at first his attention was directed to the College of Surgeons, and the Society of Apothecaries of England alone; and all his studies were undertaken and long pursued in reference to the requirements of these licensing bodies; indeed, his preliminary professional studies approached their completion before he was acquainted, even by name, with many of the institutions which are empowered to grant medical licenses: and then, if he had desired ever so much to retrace his steps, or pursue a different course, it was too late. Doubtless, the experience of others has been similar; and even with the best counsel, while there are so many institutions, it will always be a difficult matter to make a choice.

But it is an evil *as it respects medical men themselves*, for to it may fairly be attributed much of the jealousy and rancour which exist among them. On account of the differences in their qualifications, they encroach upon and interfere with each other in the respective departments of practice,—the physician and the apothecary practising surgery, and the surgeon practising physic, &c.; and thus quarrels originate and ill-feeling is produced. As it was of old in the religious world, so is it now in the medical world:—one said, “I am of Paul, another of Apollos, another of Cephas,” to the great injury of the whole body.

But we remark further, that this is an evil *as it respects the community at large*; for it makes them the ready dupes of the wholesale quackery which so extensively prevails. As there are so many places where licenses to practise may be obtained, and scarcely any checks or hindrances to quackery,

it often happens that the public health falls into the hands of unprincipled persons, without qualifications of any kind; while the fictitious medical titles they employ give them power and opportunity to prey upon the lives and property of their fellow-creatures. A writer in a weekly periodical has spoken out boldly and truthfully on this very point,—*i.e.*, on the numerous institutions for granting degrees, &c., and the various titles of medical men. He says, “To the public all this is mystery. The general public cannot understand these mysteries. Any one who chooses to profess and publicly to advertise that he is competent to treat and cure diseases, is considered by the public a medical man, and he passes under the general designation of a ‘Doctor.’ To the general public it is a mockery, a delusion, and a snare.”* The language of this writer is strong, but he has not exaggerated the evil. The appellations, “Doctor,” “Surgeon,” &c., are not distinctive of qualification; and hence the land is filled with charlatans and impostors of all kinds. In England, we have in practice men holding foreign diplomas,† which may be purchased for a few pounds, and a certain amount of false swearing. We have men practising without diplomas, as Homœopaths, Hydropaths, Prescribing Druggists, &c. We have specialists,

as

* Medical Times and Gazette, February, 1858.

† Not long ago, a man was tried in England for maltreating a case of midwifery, and acquitted on the ground of having a diploma from New York; and, more recently still, an individual residing at Maidstone was tried for a similar offence, and the facts were so glaring that he was sentenced to two years’ imprisonment. What this man’s qualification might be, at the time of the trial, I am not prepared to say, but I knew that he practised at Maidstone for some time with a certificate of attendance on a single course of lectures, placed in his window, as his only license or ground of qualification.

as Aurists, Oculists, Cancer Curers, &c., all known to and employed by the public as "Doctors."*

[In the *Spectator* (No. 444) may be found the copy of a quack doctor's handbill, which, the writer says, was put into his hand by a *fellow without a nose*. "In Russell Court, over against the Cannon Ball, at the Surgeons' Arms, in Drury Lane, is lately come from his travels a Surgeon who hath practised surgery and phyfic, both by sea and land, these twenty-four years. He (by the blessing) cures the yellow-jaundice, green sickness, scurvy, dropsy, surfeits, long sea-voyages, campaigns, and women's miscarriages, lying-in, &c., as some people that has been lame these thirty years can testify; in short, he cureth all diseases incident to men, women,

* A minister and a medical man were in company together, when the conversation turned upon Homœopathy and Homœopathic doctors. The minister—a zealous advocate of the system—remarked that it was prejudice alone which prevented its spread amongst professional men, and that they did not give the works of Hahnemann and his disciples a fair and candid examination, or they would see its superiority over their own systems and practice. The medical man slyly inquired, if his ministerial friend had carefully examined the doctrines of the Mormons, and especially the *authentic* book which Joe Smith left behind him. "No, indeed!" he said; "Mormonism had falsehood so palpably written upon it that it would be a foolish waste of time to examine it, or read the book." "Exactly so!" was the quiet reply.

If it were necessary to examine all the wild and absurd notions respecting medical treatment which prevail in the present day before one could arrive at any settled and rational mode of practice, the task would indeed be herculean. This Homœopathy itself pretends to treat diseases with portions so diluted, that one drop, or one grain, of any medicinal substance mixed with the waters of the German Ocean, if administered in infinitesimal doses, shall form an efficient medicine in certain cases, or even the mere *smelling* of this, or a similarly diluted medicament, shall be a powerful remedy in others.

women, or children." *This is good*; but the following advertisement, which seems to have been lately distributed by house-row in a large town in the west of England, is not a whit inferior to it, either in ignorance or audacity :—

“DR. PETER WYATT,

“Professor of Astrology, Mystical Questions, Calculator of Nativities, &c.

“Any lady or gentleman writing from a distance, who wishes to have their nativity accurately calculated, they are desired to be particular in stating sex, and exact time of birth, including the date of the year; month, day of the month, day of the week; and, if possible, the precise hour. All letters requesting nativities must be accompanied by forty-two postage stamps. He will point out by astrology their fate, destiny, and their appointed time of marriage, whether late or early in life; family of children of either sex, and all things through life; and, as nearly as possible, yearly. If any person sends a correct birth, as before said, he will positively send their complexion, temper, and general principles; whether fortunate or unfortunate in life, and many other questions. Any one sending eighty-two postage stamps, and giving the correct time of the birth of a long-absent friend, he will tell them whether he or she is in sickness or good health; alive or dead; in riches or poverty; whether to return to their native land or not; likewise, by his long-hidden secrets, he will tell what part of the body is afflicted, the disease, whether curable or not, &c. . . . We have spent many days in studying the secret science of astrology, and on botany, botanology, &c., in connexion with man and beast. . . .

“Dr. P. W. is of original wealthy yeoman, near P——; has completed many perfect cures of dangerous diseases by
his

his hidden mysteries, both to man and beast, after having been left incurable by the most eminent physicians of the day.”]

Pharmacy.—It only remains for us, at this point, to notice the state of pharmacy in the medical profession, and a few sentences may suffice to tell all that need be told respecting it. The *Apothecaries* must serve an apprenticeship, during which they are supposed, among other initiatory matters, to be engaged in dispensing and compounding medicines; and many of them prepare and dispense their own medicines, when they have commenced practice: so that the knowledge of pharmacy must be more extensive in this than in the other departments of the profession. Next to these, we may rank the *Physicians*, for both the universities and the Colleges of Physicians make pharmacy a prominent item in the preliminary course of study. The Colleges of Surgeons of Scotland and Ireland consider the subject of importance, and require a considerable amount of attention to be paid to it; but the *College of Surgeons of England* almost ignores it, and, as a consequence, the members of the college despise it when they have obtained their diploma, deeming the practice of pharmacy derogatory to their professional respectability.* The writer was acquainted with a student, who, as regards hospital practice, lectures, &c., was prepared to pass the college examination; and yet he could not write a prescription from his ignorance of medicines and their compounds. A compulsory apprenticeship for two or three years, and
employment

* The regulations of the College of Surgeons of England required six months of pharmacy in 1843; but the regulations of 1858, only require three months.

employment in dispensing medicines, would be the best plan to secure to all the departments of the profession a competent knowledge of this subject.

We deem it necessary to add a few lines on the *actual practice* of pharmacy in Great Britain and Ireland.

In England, it is divided between the druggists and the general practitioners—the former, however, having the larger share, for they usually prepare and dispense the medicines ordered by the physicians; while, for the most part, the general practitioners merely dispense the medicines, already prepared for them by the wholesale druggists, to their own patients. It is true there are, in London chiefly, a number of practitioners who may be designated *druggist-doctors*, and by whom the medical profession is justly considered to be scandalised and degraded. These are qualified medical men, who not only compound and dispense medicines for their own patients, and the prescriptions of physicians, but likewise still further encroach upon the trade of the druggists by retailing drugs.

In Scotland, pharmacy is in the hands of the surgeons (general practitioners) and the druggists, as in England; but that anomalous character, the druggist-doctor, is, we believe, almost, if not altogether, unknown in that country.

In Ireland, pharmacy is principally monopolised by the apothecaries, who claim the exclusive privilege to keep open shops and compound medicines by an Act of Parliament, under a penalty. It appears that, until a very recent date, no physician or surgeon in Ireland could compound medicine without the license of the apothecaries; but now it is provided, by the new Medical Act (1858), that every registered medical or surgical practitioner shall be entitled to demand and recover the cost of any medicines supplied by him *to his patients.*

patients. The exclusive privilege, however, of keeping open shop, and compounding the prescriptions of others, by the last section of the Act, is secured to duly licensed apothecaries in Ireland.

Some medical reformers have thought that it would be an improvement to make the druggists the only pharmacutists, and thus to dissociate the profession from pharmacy altogether; but as neither in England nor, so far as we can ascertain, in Scotland, is there any law to prevent the most illiterate persons from keeping shops and compounding and dispensing medicines, this certainly would not be for the public weal. Many medical men continue to practise pharmacy for the sake of securing accuracy in the preparation of the medicines they prescribe, and some from long association and habit; and we confess we are unable to discover anything improper or undignified in such a practice.

The chief evil, then, afflicting the medical profession of the present day, as we have seen, is "*multiplicity of institutions for granting medical licenses,*" giving rise to *unequal qualifications* and a *multiplicity of titles*. The writer believes there is a remedy for this evil, and this remedy will be found in *one curriculum and one general examination for all who enter the profession, and in the proper registration of qualified medical men*. This will let the student see clearly what is expected of him when he commences his studies; it will tend greatly to put an end to professional squabbles and animosity; and it will furnish the public with a sufficient and definite guarantee as to the qualifications of those who are appointed to treat their diseases.

Any man who takes upon himself the responsibility of amending the laws which relate to the medical profession must keep this two-fold object in view, or he will signally fail

fail to meet the wants of the case. The "rights and privileges" of the numerous examining bodies which at present exist should not be hastily or rashly sacrificed; but out of them, and by mutual agreement among them, if this be possible, one general examining Board might be formed, so that the titles, "Doctor" and "Surgeon," if retained, may become definite and intelligible. The change should be so thorough and complete that the question, "Where did he pass?" or, "Where did he obtain his degree?" need never be asked again, forasmuch as there would only be one* place where it would be possible to pass or obtain a degree. Then let all duly qualified medical men be properly registered, so that their position in the "corps medical" may be settled, and their qualifications readily ascertained. This method, if we are not mistaken in the entire matter, would speedily secure a certain and reliable standard of medical education, and help greatly to exterminate the whole herd of quacks and pretenders, who, under the name of "Doctors" or "Physicians," have long disgraced the profession and cheated and afflicted the people.

The writer had proceeded thus far, when he met with an account of what was called "The Bill of the Corporations." The Colleges of Surgeons of England, Ireland, and Scotland, the College of Physicians of England, the Faculty of Physicians and Surgeons of Glasgow, and the Society of Apothecaries, England,—waiving all minor differences, it was said, had agreed on the following points:
—1st.

* Or it might be more convenient to have one examining Board for each country, viz., England, Ireland, and Scotland, but united and agreed as to qualifications and rights. Would not an examining Board formed in a similar manner to the General Council of the new Medical Bill be just the thing that is wanted?

—1st. Equality of qualification ; 2nd. Reciprocity of rights ; 3rd. Authoritative registration. Such a Bill, a little more liberal in its construction, so as to have included the rest of the medical institutions, or, at least, all the most respectable of them, is the very thing advocated above, and would meet the case fully ; while, as it would have been the “act and deed” of the licensing corporations themselves, of course no very important “rights or privileges” would have been sacrificed. Lord Elcho’s Medical Bill, which provided one common examination for all on entering the profession, was perfectly satisfactory on this head, however defective it might be in other respects. But the Medical Bill, which has recently become the law of the land, “leaves the numerous institutions to examine respectively as heretofore,” and is therefore glaringly defective if the above views be correct. It must not, however, be accounted entirely useless, for it provides for the registration of qualified medical men, and imposes penalties for the assumption of false medical titles, and may, therefore, form the groundwork of a better Bill hereafter.

GENERAL PRELIMINARY EDUCATION.—We have already made some allusion to the “preliminary education of medical and surgical students,” but we deem it desirable to notice the subject somewhat more fully in this place. We have said (p. 18) that the matriculation studies, &c., of the universities are of questionable utility to the student of medicine. We venture further to say, that so much attention to so great a variety of preliminary subjects as logic, metaphysics, modern languages, &c., &c., is not necessary, and is therefore a waste of time and money. These subjects are, in many cases, lost and forgotten in the essential matters which must immediately succeed them ; and
if

if they are not forgotten, they are not helpful in the treatment or in the cure of diseases. They may help him to talk learnedly of "mind and matter," to "reason in syllogisms," or "to work out a profound problem;" but in all this we conceive there is not much to help him to understand the maladies, or to alleviate the sufferings of his fellow-creatures. The elements neither of respectability nor of capability to practise medicine are to be found in these things. These are only found in moral qualifications, and in the due application to, and appreciation of, medical matters—matters connected with the art or calling followed; and to make a medical student learned in other things does not necessarily add either to his respectability or his usefulness. It is generally believed that the study of classics and mathematics prepares the mind for deep and concentrated thought—for that abstraction, in fact, which is so necessary to success in mental labours. This is not denied. It is true of all studies that require great attention before they can be understood and grasped by the mind; and, perhaps on this account especially, the Latin language, and the elements of mathematics, or, at least, the higher branches of arithmetic, should be included among the things to be taught in the preliminary education. But many of the examining bodies which, up to a recent date, required little or not any proof of preliminary education, are now running wild on the point. Besides instituting a preliminary examination in classics and mathematics, some of them examine in the modern languages likewise. If such or similar examinations obtained in the universities only, it would not be surprising; but even the Apothecaries' Companies have instituted them. In Ireland, they examine in French, in science generally, and in English composition, as well as in classics and mathematics;

matics ; and in England they examine in classics and mathematics, and recommend the student to devote some of his time to the study of the *French and German languages*. And if so many attainments and so much refinement be necessary for *mere traders*,* what kind of an education will the universities be obliged to adopt, and how will they indoctrinate their *alumni* so as to preserve their own character and supremacy? In France, there is the same undue anxiety manifested respecting the preliminary education of students of medicine. In 1852, the degree of Bachelor of Letters, which before that period had been required of all before they could take the degree of Doctor of Medicine, was, we think, wisely dispensed with. But now it is pretended, after only five years' trial, that this has lowered the *morale* of the profession ; and a memorial has lately been presented to the Emperor, by the Minister of State for the Department of Public Instruction, praying that the preliminary degree in letters may be re-established ; and the Emperor has granted the prayer of the memorial ; and, after November, 1861, all the aspirants to the doctorate must hold the diploma of Bachelor of Letters. "Why, then," says the Minister, "should the candidates for the degree

* The apothecaries of Ireland keep open shops and dispense the prescriptions of the physicians ; and a special clause is inserted in the New Medical Bill for them and for the druggists generally ; and in England the Apothecaries' Hall is a drug establishment, and many of the licentiates keep open shops and retail drugs. Yet they find fault with the encroachments of the druggists, and cry out for severe enactments against them. "The law, henceforth," says a writer, "gives protection to the medical profession. But that it should be worthy of that protection, and of the esteem and respect of men, rests with no human law. We should become a law unto ourselves, or rather act above all law except the Divine, since it is quite certain that we alone must protect the honour of the medical profession."

degree of Doctor of Medicine be exempted from a general examination in literary studies? Indeed, it is from those studies that the taste, the heart and the mind derive the most refined tendencies and the most happy disposition. The physician, bound to endless toil, consulted by every class of society for all the ills which affect body and mind, obliged to use so much discretion and moral action, ought to be, above all, prepared for his scientific apprenticeship by his having undergone a complete course of instruction in literature. By neglecting the humanities, he neglects an element indispensable to his own interest, he puts aside a means of success and influence, he creates, perhaps, a real obstacle to the authority as well as to the progress of the art he exercises. Such is the short analysis of the reasons which have prevailed for requiring the diploma of Bachelor of Arts from candidates for the degree of Doctor of Medicine."

But some of these reasons, to say the least of them, are puerile and unsatisfactory. What have refined tendencies and happy dispositions, or impulses, in general terms, to do with the practice of physic? What does society at large care about the general education of their doctors, provided they are skilful in their profession? And even if the medical man should neglect the "humanities," does it follow that he has not made himself fully acquainted with the art he exercises? If he desire to turn his attention to these things in the intervals of severer studies, and for the sake of recreation or amusement, we say not a word to dissuade him; but we are at issue with those who look upon them as an essential part of his education, and a *sine quâ non* to his success and influence among his fellows.

Truly, men can be and have been great physicians and great surgeons without these extraneous attainments! We believe

believe that a medical man should have a liberal education; but we are also persuaded that to require him, at the commencement of his student-life, to turn his attention to so great a variety of so-called collateral subjects, bearing remotely, if at all, on his future course, is far more likely to distract and confuse his mental powers than to give them edge and concentration; and, in general, his knowledge of each of them will be superficial and profitless. It is well known that some individuals cannot master a language until after an immense amount of labour; and others again cannot easily apply themselves to mathematical studies; and how few are the students that can mentally digest such a variety of subjects as are included in what is called a liberal education? And, on the other hand, how often do we hear the remark that a man must devote himself almost exclusively to *one object*, if he would know it well—must, indeed, be a man of *one aim* if he desires to excel. For example, the mathematician applying himself with diligence and ardour to mathematics—the linguist to languages—the metaphysician to mental studies, &c. We say, then, that such a preliminary education as is marked out by several of the examining bodies should be called extravagant rather than liberal; and we maintain that an education embracing so many subjects must be imperfect; and the thought to which we wish to give prominence in these remarks on preliminary education is this,—that all the energy of the scholar should be concentrated on *a few subjects bearing on his future course*; and thus he will be better prepared for his professional studies, than if his attention had been divided and distracted by being turned to so many matters.

We observe, in passing, that the Royal College of Physicians of England, which certainly holds as high a rank

as any of the medical corporations, both as respects the character of its examination and the value of its license, whilst it rightly exacts a lengthened medical education, only requires classical learning in addition; and, indeed, Greek is not essential; a thorough knowledge of Latin (*vide* page 8) only being indispensable. We are glad to place this fact on record here. It is valuable in reference to the point in hand, as it, at least, shows that one of the oldest and most distinguished Colleges of Medicine in the world has no sympathy with the opinion, that so many and such a variety of extraneous attainments are necessary to prepare a man for becoming eminent or successful in his professional pursuits.*

Therefore, let the young men who are intended for the medical profession have a good and suitable education rather than one so elaborate and diversified as is frequently recommended by the bulk of the examining bodies. We have a rough outline of the subjects which we think should be included in the education mentally sketched out, but we do not presume to propose such an outline here, for it would require great discrimination to decide what these subjects should be; and it is unnecessary and beyond our aim to enter more into detail. We offer a few suggestions, not a matured plan. We desire, however, to observe that our opinions on the matter, as expressed above, have not been hastily formed, but have arisen out of a strong conviction which is the growth of years; and to reiterate, in stronger language, if possible, our belief that the great secret of all right instruction will be found to consist in the selection and
thorough

* "It warn't your Greek that made you president, or what little Latin I picked up at night-school, that made me an *attaché*."—*Sam Slick's Wise Saws and Modern Instances*.

thorough teaching of a *few well-chosen subjects, having especial reference to the future career of the scholar.**

The preliminary education being finished, the student of medicine should now be placed under pupilage for a period of three years, that he may learn to compound and dispense medicines, and be initiated into the studies and duties which directly appertain to the profession. If, after this, four years more are well spent in a good medical school, a man of ordinary mental capacity will have had an education which will enable him to pass any reasonable examining Board with ease and credit, and to practise his profession with comfort, respectability, and success.

MORAL TRAINING.—The moral training of young men intended for the medical, or, indeed, for any other profession, is of great importance, both as regards the respectability of the profession and the public good ; but the subject is a difficult one, and we offer the following suggestions with much diffidence. An attempt is made in this direction by the universities ; for moral lectures form a part of the prescribed “curriculum,” and the candidates are examined on the subject ; and although it is to be feared the attempt is abortive and fruitless, yet perhaps this is all they can do. It is to be hoped that the benevolent individual, who left his money to found these “Carmichael Prizes,” meant by morality something more than natural religion ; and the remarks we are about to make here must be understood as having reference to the morality which the word of God teaches and prescribes. It is

* At the first middle-class examination lately held by the University of Oxford, several of the candidates were sadly deficient in the orthography and construction of the English language, although it is said they were clever classical scholars.

is certain that the Bible contains *the only true code of morals* ; and it is when men submit themselves to its teaching, and come under its influences, that they improve in virtue, and are ready for “every good word and work.” David the psalmist, in contemplating the structure of the human frame, was led to exclaim, in astonishment and adoration, “we are fearfully and wonderfully made ;” but young men of this age, who have far greater opportunities for acquiring a knowledge of this wonderful structure than he had, are but seldom led to look from the creature to the Creator, or to devout feelings and expressions by their contemplations ; and some have blamed the study of anatomy especially for the infidelity which, at various periods, has prevailed among medical men.

But that this study should produce so dire an effect is a monstrous thought. Is not this infidelity rather to be attributed to the general feeling of opposition to religious truth which is prevalent in the world ; and somewhat, perhaps, to the fact that numbers of students are associated together for the purposes of study, without sufficient guardianship or oversight when they are young in years ? Happily, the time is gone by when learned professors held infidel opinions, and gloried in giving utterance to them in the presence of the students they sought to instruct. The moral aspect of the medical profession has improved wonderfully during the last half century, inasmuch that a man may be an earnest Christian—yea, a zealous disciple of the world’s Saviour—without losing caste ; and in the lectures delivered at our medical schools one is not now surprised to observe some recognition of Divine Providence, or a few bold sentences in commendation of the Christian religion. But as of old “the world by wisdom knew not God,” so in this age God is not known
by

by many learned or by many wise men. Yet we think we see the signs of a general and wide-spread awakening on the subject of religion, and the not very distant day when the highest order of intellect, of talents, and of learning, will be consecrated to the service of God. Then, truly, morality will be but another name for the *religion of the Bible*; and professional students, and, indeed, all students, will learn their morals at the feet of Christ; and He, the "Great and Good Physician," will be boldly presented to them by their teachers as an object worthy of their highest homage and regard; and through His matchless example—in its sympathy for distress and misery—its untiring diligence in working good—and its pure unselfishness—He will command their admiration, and draw them, with all men, to Himself. Truly, Christ is an appropriate and admirable study for those who are just entering upon their professional career! In His intense pity for the sufferings of mankind, and His active and unceasing efforts to relieve them, He is a pattern they should try to copy; and although they may come immeasurably short of it, yet, aiming thus high, they will prove no mean auxiliaries in the battle which He is waging with sin and misery, and sorrow and pain. We do not, however, believe that, in the present day, much can be done in the public schools and colleges to improve the morality of our youth. Whatever is done towards this good work must be done previously, and at home.

If parents and guardians would, with due earnestness and perseverance, bring the principles of religion to bear upon the minds and hearts of their children, and urge these upon their attention as the "first and principal thing;"—if they would set before them the perfect example left by Jesus Christ for their imitation, and so lay a good groundwork of
morality,

morality, we should have better and nobler men in all stations of life;—and if, as they grow in years, they were encouraged to attend the Bible classes which are in connexion with almost all Christian communities,* or the Christian associations for young men which are established throughout the land; and further, if, when they are sent out into the world as apprentices, or to pursue their studies, they were placed with religious men, or, at least, with men of good reputation, where their conduct would be more or less inspected and controlled,† it is judged the most suitable means will then have been employed to promote the improvement of their moral character.

II. THE STATE OF THE HOSPITALS AND SCHOOLS OF MEDICINE, SURGERY, AND PHARMACY.

Our hospitals, as institutions for the education of young men who intend to devote themselves to the medical profession, are of the highest value and importance. Here the sad chart of man's diseases and pains is spread out, and daily examined and explained, so that, if the eyes and ears are open,

* An excellent institution has been established some years in Scotland, called the Medical Missionary Society, having for its object the training and sending qualified medical men as missionaries to the heathen. We observe, with pleasure, that this Society is extending its operations to England. We wish it God speed, for inasmuch as it seeks to enlist the youth of the profession in the cause of Christ, it must be beneficial, though it may fail as to its original design.

† The plan generally adopted is to send the student to some large town to pursue his studies without any oversight whatever, and very frequently he spends the greater part of his time in the follies of the day—and then GRINDS for six months to get through his examinations. What he needs is proper control and counsel,—to be kept from idleness and dissipation,—and so from immoral associations and habits.

open, facts and principles, whose value cannot be estimated, may be acquired and stored away in the mind. Here instruction is imparted at the bedside of the sufferer, where the well-practised teacher calls attention to every symptom, and notes and watches every change. And here earnest and thoughtful men cannot fail to lay the groundwork of future success in the discrimination and in the treatment of disease.

In the general features all hospitals are the same as to their object and use. They are excellent establishments in two aspects, namely, as asylums for the poor in their sufferings, and as schools for the training of medical men. We have, at present, to speak of them as schools only, and as such they are of inestimable value. Nevertheless, we believe it is possible to make them still more efficient, and in what way we shall here attempt to show. The hospitals and schools of medicine, surgery, &c., are connected, *i.e.*, the medical school and hospital together form one institution for the education of medical men. We shall notice the teaching of this institution under the following heads:—

1. THE WARDS OF THE HOSPITAL.
2. THE OUT-PATIENTS' ROOM.
3. THE DEAD-HOUSE.
4. THE DISSECTING ROOM.
5. THE LECTURE ROOM.
6. THE DISPENSARY.
7. THE OPERATING THEATRE.

1. *The Wards of the Hospital.*—The remarks we have made above respecting the hospitals must be regarded as having especial reference to the “wards.” It is here, we repeat, that “instruction is imparted at the bedside of the sufferer, where the well-practised teacher calls attention to every symptom,

symptom, and notes and watches every change. And here earnest and thoughtful men cannot fail to lay the groundwork of future success in the discrimination and in the treatment of disease." But the facilities which are afforded in the "wards" of the hospital for the acquisition of a knowledge of disease, are not always made available to the student. Sometimes, as one has said, "it happens that the medical officers, upon whom the imparting clinical instruction should devolve, are but little qualified for the task." They either neglect to teach, or they are not apt to teach; and in this case they will not allow the students to "walk" round the wards with them; or if they allow it, as a matter of form, it answers no good purpose, for they do not utter a word of instruction as they pass along. In a certain large metropolitan hospital we saw a physician go round the wards from time to time, without being attended by a single student; and, on inquiring the reason, it was said, "*he does not allow them to follow him.*" Surely this is not a state of things to be suffered. Our hospitals being the only institutions for the training of medical men, are of prime importance to the country, and the medical officers should be both able and willing to impart instruction; and, if found deficient on trial, they should be dismissed from their offices. All favouritism should be avoided; and no talents, or abilities, or eccentricities should be allowed to weigh against this grand defect of neglecting or refusing to help the student. In a word, when we consider that so much is at stake—that to clinical teaching we must look for a succession of able and efficient practitioners for this and other lands—it is evident that none but able, zealous, and "right men" should be chosen to fill up the vacancies as they occur in the hospital medical staff.

We have yet another complaint to make against the physicians and surgeons of our hospitals generally, which is, that they do not bring under the notice of the students some of the special diseases of women. But we call to mind that this treatise is intended for the non-medical as well as the medical reader, and therefore it may suffice to designate these diseases *special*, as above, rather than to make further and more particular reference to them. Whilst thus avoiding even the appearance of indelicacy, we yet desire earnestly to deprecate the course which is pursued with regard to such cases in the hospital. They are taken away by a nurse, or by the matron, to a room set apart for the purpose, from which the students are excluded; and examined *privately* by the medical officer of the day, as he makes his visits to the wards. Thus the student is hindered from the study of some most interesting and important diseases; and must gain his knowledge of them after he has commenced the practice of his profession; and it is not to be wondered at, if sometimes he does this to the injury of himself and his patients. We know that the "objections" which women make to the examination and inspection of these diseases, is made the plea for this procedure; but such objections are easily overcome, and we should hear less and less of them, if they were not fostered and encouraged. This *false delicacy* should certainly be discouraged in our hospitals, and then, as in all Continental hospitals, it would be unknown. We believe that women, when suffering under these diseases, would always submit to an examination—properly conducted—in the presence of students; and, therefore, the extreme modesty of medical men on this point is not only injudicious, but somewhat ludicrous as well.

On the other hand, the advantages afforded in the hospital
wards

wards are not duly valued by numbers of students; and, not unfrequently, the physicians and surgeons are almost deserted when they go their accustomed rounds, and no means (in many hospitals at least) are taken to ascertain whether the students attend or not. Now it is evident that irregularity and neglect here, will materially damage the student; for it will diminish the chance of future success, both as to his examinations, and his after career as a medical man; and, therefore, some means should be adopted to enforce a regular attendance on hospital practice.

2. *The Out-Patients' Room.*—The remarks we have to make here, may naturally supplement what we have said respecting the wards of the hospital, for the teaching of both is very similar; the only difference being, that here the cases are more numerous and diversified, and the patients are not confined to their beds. One or two observations on this head must suffice. It is an excellent school with few scholars—a large rich field, but almost wholly uncultivated. At a certain hospital, we visited, occasionally, the room appropriated for the treatment of the out-patients afflicted with diseases of the eye; but we never met with any students, although this is a special and important subject. In fact, with the exception of a few of the pupils of the medical officers of the hospital, and a few students who are immediately connected with the hospital, as dressers, assistants, &c., the attendance is very irregular and desultory.

3. *The Dead-House.*—The instruction which the dead-house is calculated to impart cannot be over-estimated, but yet, in general, it is very defective; for, in many hospitals, there is no system or regularity observed respecting it. Doubtless, examinations of the dead body are frequently made by parties in the hospital; but not by responsible parties,—not
by

by the lecturers, or demonstrators, or teachers. They are not made especially for the profit and advantage of the students, and therefore very few of them are found in attendance upon such examinations. Yet how important they are, and what valuable lessons may be learnt in the dead-house! It is to these examinations that we owe our knowledge of the effects of diseases and accidents on the structure of the various organs of the body—our knowledge, in fact, of morbid anatomy. This knowledge is especially needful to the medical jurist; nay, it is needful to every medical man; for it is evident he will be best able to grapple with any disease who best knows what changes it usually produces in healthy organs, in the various stages of its progress. “There see,” says an elegant writer,* speaking of the dead-house, “how it is that morbid anatomy enables us to look back, as it were, through an avenue, upon the countless paths through which death has made his approach; see how we can track him in his progress, and mark how, step by step, he has gained his territory, and at last achieved his final victory. But each such victory, if only rightly used, weakens him while it strengthens us.” . . . Therefore, due and sufficient notice, we suggest, ought to be given, of every *post mortem* examination, and some competent person should attend to explain and demonstrate; and in every possible way the student should be encouraged and stimulated to give earnest heed to the appearances which the human body presents, after the wondrous powers of life have succumbed to disease.

4. *The Dissecting Room.*—The importance of anatomy, as
a branch

* Mr. Henry, in the Introductory Address at the Middlesex Hospital, October, 1859. Page 15.

a branch of medical education, cannot be exaggerated. It is to medical knowledge what the alphabet is to a language, or what the foundation is to a building. The neglect of it ought to be guarded against with the utmost solicitude and vigilance. The dissecting room is a place of much better repute now than it was some time since. Some twenty years ago, or less, there was a total want of order—nay, even of ordinary decency—in conducting dissections at many medical schools. Subjects were provided in tolerable plenty; but no one seemed to know or to care whether they were studied or not; and drinking, smoking, and brawling were the very *rational* occupations of the place. In those days, it was no uncommon thing to see a regular battle among the students, parts of the human body forming their weapons; whilst any that were inclined to be more orderly than their fellows, might expect to have the *bowels* or other *viscera* flying about their ears. Happily, these sad times are at an end, and now the demonstrator is generally found in the dissecting room, directing, assisting, or overlooking the student at his work; and the microscope, that wonderful aid to science, is employed, in the hands of efficient teachers, in investigating the structure of the human frame. Looking at the arrangements of the dissecting room, and the helps which are afforded the student, one would think that with ordinary application he could not fail to obtain a thorough knowledge of anatomy. But, nevertheless, he does not obtain this knowledge; and even after some months additional *grinding*, he frequently fails to pass, when he appears before the examining bodies. And he does not obtain the required amount of knowledge, just because he is not *compelled to work*. When he is engaged in dissecting, every needful assistance is provided for him; and
in

in this respect, the arrangements of the dissecting room are admirable; but if he be idle, or afraid to soil his fingers, it is possible for him to pass through the allotted years of study without having dissected to much profit. In the dissecting room may frequently be seen a leg or an arm, or some other part of the "subject," the dissection of which has been commenced; but if the observer understands the matter, it will be evident to him that nothing has been made out, and that the *part* has been thrown aside, and is wasted and useless.

The teaching of the dissecting room, as we have seen, is excellent, but it would make it still more efficient—indeed, we had almost said it would make it perfect—if a *given amount* of dissection were required to be done to each part supplied to the students; or, in other words, if it were required that each part commenced with should be thoroughly dissected, or the certificate for the same withheld. The student cannot afford to be idle, and therefore every legitimate means should be used to make him work.* He will have to exercise his profession and earn his livelihood in the midst of the innumerable quackeries of the day; and if, for the well-being of society at large, and the credit of legitimate medicine, as well as for his own emolument and advantage, he would confront and drive back the vulgar herd, his knowledge of every subject connected with his calling, and especially of anatomy, must be thorough and extensive.

5. *The*

* At some hospitals, the parts taken by the students for dissection are notified on a paper, which is hung in a public place for a week, and cards are called once or twice a week during the session, and if the students are absent a certain number of times no certificate is given; but this is the exception, not the rule.

5. *The Lecture Room*.—Lectures have always held a prominent place in the course of study laid down by the various examining bodies, and hence very much of the instruction given at our medical schools is conveyed in that form. And although of late a great outcry has been raised, through the medical press and in other ways, against this mode of teaching, perhaps it would be a difficult matter to find a substitute for it. Lectures are generally made up of the accumulated wisdom of the medical world; they are compiled from the medical literature of the age, and that they may be made attractive, is evident from those that have been published by Watson, Elliotson, and others. It cannot be supposed that such lectures when delivered were dull and profitless, or that they did not command the attention of those who listened to them. Nothing can equal the human voice as a means of imparting instruction, and this is understood and appreciated in our day; and general education in many establishments is now conducted orally by living, speaking men, rather than by the dry abstract rules of books. That some men are dry and uninteresting as lecturers it cannot be denied, but others, some living and some dead, have been of world-wide renown, have commanded numerous auditors, and have left the impress of their teachings on their age; so that the fault is not in the lectures but in the men who deliver them. If they are not *earnest* men, they are *drones*, and they should be expelled from the busy hive, for they retard, instead of helping the active and diligent workers around them.

Extremes are always dangerous, and at the present time there are certainly extreme views abroad on this subject; and some there are who, from the violent way in which they have written against lectures, seem to think, and they would persuade

persuade others, that they are an unmitigated evil. But surely this is not the right view to take of this matter. Look at the lecturer on anatomy. With the help afforded by diagrams, by specimens, and by demonstrations from the dissected body, if he be alive to his duty, and in earnest, he cannot fail to assist the attentive student. The same may be said of each lecturer in his own department. The botanist has his plants; the toxicologist his poisons and tests; and the chemist his drugs and chemicals. Then, further, and what is of great importance, the attendance on lectures is compulsory. The student may neglect hospital practice and dissection, but he is compelled to attend a fixed and determinate number of lectures during the session, or his certificate is refused. This helps to keep him at work, and in or about the medical school; and but for the lecture-hour it is probable he would be wasting his time in foolish and unprofitable amusements. It is possible that lectures might be made more instructive and more useful than they are in general. The lecture, for instance, might last half-an-hour, and the rest of the time might be spent in an examination on the subject treated; and this plan might be continued daily, or at every lecture throughout the course, instead of once or twice a-week as is now the custom. Other plans will suggest themselves to the lecturers who are anxious to give instruction in the best possible way; but greatly to abridge the number of lectures, we firmly believe, would be most injurious, both to the student and to the profession at large.*

6. The

* The College of Surgeons of England, in the new regulations (1858), requires fewer lectures to be attended. We fear the change will not be any improvement.

6. *The Dispensary*.—In connexion with the hospital there is a dispensary, where medicines are compounded and dispensed, both to the in and out-patients, and here practical pharmacy is professedly taught. But, in point of fact, practical pharmacy is not of much account in the medical schools, nor is any vigorous attempt made to teach it; and the students, unless they have been instructed elsewhere, at the close of their “curriculum” are profoundly ignorant of the subject. As a rule, they are not employed in the usual operations of pharmacy; nay, indeed, they need not even enter the dispensary, or know that such a place exists, from the beginning to the end of their studies. Nor do we think it is necessary to make the dispensary available for teaching pharmacy. The subjects included in the student’s curriculum are very numerous, and this may well be left out; and we are prepared to uphold the opinion we have before expressed, namely, that an apprenticeship of two or three years with proper oversight, where there will be daily employment in the preparation of medicines, is the best method of giving instruction in practical pharmacy.* (*Vide* p. 23.)

7. *The Operating Theatre*.—Perhaps it is called a theatre because of its shape and appearance; but, in truth, it is a theatre in another sense; and many a sad and tragic scene has been witnessed in it. Here the student must gain the “*lion’s heart*,” or he will never make a successful surgeon; for who would trust his life into the hands of a timid and fearful operator? The arrangements of the operating theatre are generally very good, and every facility is afforded for

* At some hospitals, the resident medical officers or house-surgeons receive apprentices, and profess to instruct them in pharmacy, and then, probably, the dispensary is made available for this object.

for seeing the operations, and stated times are appointed for performing them; but the popularity of the operation or of the operator is the only guarantee for the attendance of students. Now, although it may be true, as some have said, that every operation is an opprobrium to surgery, inasmuch as it shows that disease will run its course, despite all our remedies, and baffle all our skill, and is itself always a painful, and often a dangerous resource, leading on to death, or only giving a chance of life; yet it is very necessary that the student should be able to perform all operations readily and well. Let him be warned, then, that by an error, or even a doubt, in the midst of an operation, he will risk the life of a human being; and what is of less moment, but of some importance to him,—that a successful operation may establish him in practice at once, while an unsuccessful one, or one unskilfully performed, may irreparably ruin his prospects. And let his teachers be reminded that all operations are not great and attractive, nor are all operators popular; and therefore that some plan should be adopted to obtain from the student a regular and uniform amount of attendance here as elsewhere.

III. THE STATE AND MODE OF TESTING THE QUALIFICATIONS OF CANDIDATES OF THE DIFFERENT LICENSING COLLEGES OR CORPORATIONS IN MEDICINE, SURGERY, AND PHARMACY.

The licensing colleges or corporations, with scarcely an exception, are excellent institutions, and highly respectable. The duty of examination is delegated by the executive of these corporations to a court of examiners, which is generally chosen by ballot, and is composed of the most eminent and able men amongst them. It is said that in the
older

older institutions some favouritism exists on nomination and election days; but this cannot be practised to any great extent, for in this age inefficient men are not tolerated in places of trust. We have every reason to believe, therefore, that the examiners composing the various licensing bodies in Great Britain and Ireland are truly honourable and thoroughly practical men, who are well qualified to discharge the onerous and important duties with which they are entrusted. The institutions are too numerous; but, considered as a whole, they are perfectly trustworthy and efficient. We strongly advocate their union so as to form *one general examining board*, not because we think they are inefficient, but because from their number and differences they divide the profession into *hostile and ill-defined classes*, and give rise to the numerous evils we have previously pointed out. (*Vide* pp. 18, 19.)

Proceeding now to the mode of examination adopted by the licensing bodies for testing the qualifications of candidates for the medical profession, we propose to notice the methods of testing employed by the principal colleges or corporations:—first, in England; secondly, in Scotland; thirdly, in Ireland; and to endeavour to point out that which we believe to be the most searching and effective.

1st. The mode of examination in England.

a. *The University of London*.—First examination for Bachelor of Medicine.*

MORNING,

* The examination for Doctor of Medicine is conducted in a similar manner. At Oxford and Cambridge the examinations are conducted as at London, and, in addition, the candidate is expected to write a dissertation on a medical subject, and recite it before the Regius Professor of Physic; after which, he is examined *visà voce* on the said dissertation by the professor. There is only *one* examination for the degree of M.B.

MORNING, 10 to 1.

Monday—Anatomy and physiology, by printed papers ;
Tuesday—Chemistry, by printed papers ; Wednesday—
Botany, by printed papers.

AFTERNOON, 3 to 6.

Monday—Anatomy and physiology, by printed papers ;
Tuesday—Materia medica and pharmacy, by printed papers,
with translation of the Latin Pharmacopœia.

To commence on Friday at 10 :—

Chemistry, by *vivâ voce* and experiments ; and materia
medica and pharmacy, by *vivâ voce* and demonstrations
from specimens.

To commence on Tuesday, in the following week, at 10 :—

Anatomy and physiology, by *vivâ voce*, demonstrations
from preparations and dissections.

b. Royal College of Physicians.—Every candidate must
undergo three *vivâ voce* examinations before the president
and censors. The first examination comprises physiology ;
the second, pathology ; and the third, therapeutics. The
candidates are also examined in Greek and Latin, and a
thorough knowledge of Latin is indispensable.

c. Royal College of Surgeons.—There are two examinations
for the diploma of *Member* of the college. The *first*
examination

at these universities, but the bachelors are not allowed to practise
till they have taken the degree of M.D., or a license ad practicum in
medicina. . . . Since the above was written, some alteration has been
proposed at Cambridge. The bachelors will be allowed to practise
without taking the degree of M.D., or the license ad practicum,
&c. ; but their previous course of study will extend over a longer
period.

examination on anatomy and physiology will be made as practical and demonstrative as possible. (The examinations on anatomy will be on the recently dissected subject, and on prepared parts of the human body.)

The *second* examination on pathology, surgery, and surgical anatomy, will be partly written and partly oral; and the written part of the examination will have the precedence.

The examination for the *Fellowship* of the College occupies two days; and there is likewise a preliminary examination in classics, mathematics, and French. The examination in classics, &c., is held in April and October. The professional examination is held in May and November, and is *vivâ voce*. The subjects of the *first* day's examination are anatomy and physiology; those of the second day, pathology, therapeutics, and surgery; in the anatomical examination, the candidate is required to perform dissections or operations on the dead body. The time allowed for examination each day is from ten o'clock in the forenoon until four o'clock in the afternoon.

d. The Society of Apothecaries.—There is a preliminary examination (now compulsory) in Greek, Latin, and mathematics, held on the third Tuesday in the months of March, July, and November. Then there are two examinations for the license conducted orally.

The first examination, which may be passed after the second winter session (provided the candidate has completed the nineteenth year), embraces the following subjects:—Latin, including the Pharmacopœia and physicians' prescriptions (if not passed before), anatomy and physiology, general and practical chemistry, botany, and materia medica.

The second examination embraces practice of medicine and
pathology,

pathology, midwifery, including the diseases of women and children, forensic medicine and toxicology.

e. Army Medical Department.—Gentlemen seeking the office of assistant-surgeons in the Army, undergo a further examination, even after they have complied with the prescribed regulations (*Vide* p. 17), which is probably not very strict, but is both *vivâ voce* and written; and before promotion from the rank of assistant-surgeons to any higher rank, they must be prepared for such other examination as may be ordered before a board of medical officers.

“A Royal Commission,” in 1858, recommended that the examination should be “practical and competitive,” and that one and the same Board should conduct the examination for the medical service of the East India Company, the Army and the Navy. “That an examination in the practical knowledge of his profession as a military medical officer be passed by the assistant-surgeon before promotion to the surgeoncy.”*

f. East India Company's Service.—The examination is conducted:—1st. By means of written questions and answers. 2nd. By object examinations and experiments, when the subject admits of such test. 3rd. By practical examination of patients, and by operations on the dead body. 4th. By *vivâ voce* examination.

g. Navy Medical Department.—The examination is partly written, and partly oral, and the candidates, after having complied with the prescribed regulations (*vide* p. 17), “undergo a further examination touching their qualifications in all the necessary branches and parts of medicine and surgery, for each of the steps in the Navy medical service.”

2nd. Mode

* New regulations have been issued as this work is being published.—*Vide* “*Medical Times*,” Nov. 6th, 1859.

2nd. MODE OF EXAMINATION IN SCOTLAND.

a. University of Edinburgh.—The examination is either *vivâ voce* or in writing, at the option of the examiners : 1st. On anatomy, chemistry, botany, institutes of medicine, and natural history, bearing chiefly on zoology. And, 2ndly. On materia medica, pathology, practice of medicine, surgery, midwifery, and medical jurisprudence. Besides, the candidate must write a thesis and defend it, and also give evidence of his knowledge of Latin.

b. Royal College of Physicians, Edinburgh.—The examination consists :—1st. Of a dissertation in English on some subject in the practice of physic, selected by the examiners, to be written by the candidate in an apartment of the College Hall, under the superintendence of the examiners. 2nd. Of a *vivâ voce* examination in English, chiefly on the symptomatology, pathology, and therapeutics of disease; but in part also in anatomy, chemistry, botany, and physiology. 3rd. The examiners may institute such examination as they may consider advisable for satisfying themselves that the candidate has received a competent education.

c. Royal College of Surgeons, Edinburgh.—The examination is *vivâ voce*, and specimens of anatomy and materia medica are employed to test the practical knowledge of the candidates. The candidates are likewise examined in Latin and mechanical philosophy.

d. University of Glasgow.—At the commencement of the examination, the candidate's knowledge of Latin is tested. The professional examination is divided into two parts, and there is a full examination on all the subjects included in the "curriculum." The examination is conducted partly in writing, but is chiefly *vivâ voce*.

e. Marischal College and University, Aberdeen.—1st. A preliminary

preliminary examination in Latin, and elements of mental science. 2nd. There are two professional examinations; the first on theoretical, and the second on practical branches of medical science.

First Examination.—Anatomy, physiology, botany, chemistry, materia medica.

Second Examination.—Medical jurisprudence, midwifery, surgery, and practice of medicine.

f. University of St. Andrew's.—All candidates are required to give a written translation of a passage from Celsus, to write prescriptions in Latin with accuracy, and to be so far acquainted with Greek as to be able to give the meanings of scientific and medical terms derived from that language.

The examination *by printed papers* extends over three days; after which, each candidate is submitted to an oral examination.

First two days.—Chemistry and materia medica, anatomy and physiology, practice of medicine, principles of surgery and midwifery.

Third day.—A short commentary is required to be written on a medical, and on a surgical or a midwifery case.

3rd. MODE OF EXAMINATION IN IRELAND.

a. University of Dublin (Trinity College).—The examination is conducted both by printed papers and by oral questions. As the institution grants a diploma in surgery, as well as the degrees of Bachelor and Doctor of Medicine, the subjects of examination will depend, in some measure, on the license which the candidate seeks to obtain. For the diploma in surgery the examination is divided into two parts; one of which is devoted to anatomy and physiology, surgical anatomy, the theory and practice of surgery, and operative surgery;

furgery; and the other to the practice of medicine, midwifery, chemistry, materia medica, and toxicology.

b. Queen's University.—Two examinations must be passed.

First. On chemistry, botany and zoology, anatomy and physiology, practical anatomy, materia medica, and pharmacy.

Second. Anatomy and physiology, practical anatomy, theory and practice of medicine, and medical jurisprudence. The examinations are conducted partly by written papers, partly by *vivâ voce* questions.

c. King and Queen's College of Physicians.—There are two examinations on separate days, which are conducted orally, and in the English language.

First day.—Anatomy and physiology, botany, chemistry, and institutes of medicine.

Second day.—Acute diseases, chronic diseases, materia medica, and midwifery.

d. Royal College of Surgeons.

1st. Examination for Letters Testimonial.—The candidate is examined orally on anatomy, physiology, theory and practice of medicine and surgery, materia medica and the form of prescriptions, and must perform such surgical operations or dissections, or explain such anatomical and pathological preparations, as the examiners may require.

2nd. Examination for the Fellowship.—The examination extends over two days.

First day.—Anatomy and physiology (human and comparative).

Second day.—Pathology, therapeutics, the theory and practice of medicine and surgery, and such other branches of medical science as the Council may, from time to time, direct. The examination is oral, and in writing. In the anatomical

anatomical examination the candidate is required to perform dissections and operations on the dead body.

3rd. Examination for the midwifery diploma.—Candidates for the midwifery diploma are publicly examined on the organization of the female, the growth and peculiarities of the fœtus, the practice of midwifery, and the diseases of women and children.

e. Apothecaries' Hall.

1st. A preliminary examination in classics, in French, and in science generally.

2nd. The examination for the *license to practise as an apothecary* is divided into two parts, and may be undergone at different times, and upon separate days.

First day. On chemistry, botany, anatomy, materia medica, therapeutics, and pharmacy. This examination is principally experimental and demonstrative. The candidate must also translate the Latin Pharmacopœia and prescriptions into English.

Second day. On medicine, surgery, physiology, pathology, midwifery, and medical jurisprudence. This examination is partly written, and partly *vivâ voce*, and the candidate is also required to write prescriptions in Latin.

The first of these examinations may be undergone at the close of the first summer session, or at any period after the attendance upon the first winter and summer session has been completed, and the passing of this examination will entitle the candidate to the assistant's certificate.*

Such are the examinations for degrees and licenses to practise medicine, surgery, &c., instituted by the different corporations

* Regulations, October 1st, 1858.

corporations in Great Britain and Ireland. It will be seen that the mode of testing by written questions is employed more than the oral mode, and it will probably come more and more into vogue. The College of Surgeons of England have, during the present year, altered their examination from a purely oral one to one that is written and oral ; and, indeed, it was time for some alteration, for the old method of examination was very defective, and by it the knowledge of the candidate could not be thoroughly tested.* It is by no means certain that the mode of examination by written questions is the best ; although, as we have said, it is most in fashion at the present time. The *vivâ voce* method has advantages which the other does not possess. The examiner can put his questions in different forms, in order that the candidate may fully comprehend them. He can encourage him, and by an occasional hint refresh his memory, and help him over a difficulty. He can touch on a greater variety of subjects, and make the examination more comprehensive and full, and so more certainly bring out the qualifications of the candidate. We were therefore inclined to prefer and recommend a *vivâ voce* examination, made as demonstrative and

* The old examination was truly a droll affair. The candidate, having wended his way to the college about four o'clock in the afternoon, was kept waiting in an antechamber until his name was called, when he was at once ushered into the presence of his examiners. They sat at four tables—two at each table—and the candidate was examined by each set *just fifteen minutes*, so that the examination lasted exactly an hour. It is evident that a highly nervous man had little chance of success at such an examination as this, for he would be fifteen minutes in gathering up his ideas. It was always said, beyond the walls of the college, that if the candidate was successful at the first two or three tables he was safe ; and that at the fourth table it was often merely a *little pleasant gossip* between the parties concerned.

and practical as possible; and the examinations instituted by the Royal College of Physicians, England—by the Society of Apothecaries, England—and by the Royal College of Surgeons, Ireland—for licentiates, might serve as models of this method. But on further consideration, and inasmuch as an opinion is abroad that such examinations are not always conducted in a proper manner—for instance, that the examiners show favour to some, and are too severe on others, according to their humour; or may slur over their work, and fail to make the examination so searching and full as is necessary—we believe that the union of the two modes is the great desideratum. The public will then have a sufficient guarantee that the medical men of this age are fully qualified to treat their diseases, and the candidate will have a fair and appropriate testing of his knowledge. The examinations of the Universities, of the College of Surgeons of England for Members, and of the College of Surgeons of Ireland for Fellows, are examples of the *vivâ voce* method and that by written questions united.

The examinations of the University of London for the degree of M.B. present the best model of such an examination as we recommend, with which we are acquainted. We speak after some experience, and a most careful consideration of the subject. We have specially noted the first examination (*vide* pp. 48—49); and that the whole of the *model* may be placed before us and duly studied, we here quote the second examination in full.

Second M.B. Examination, London University. — First week. By printed papers.

MORNING, 10 to 1.

Monday — Physiology; Tuesday—Surgery; Wednesday—Midwifery.

AFTERNOON,

AFTERNOON, 3 to 6.

Monday — General pathology, general therapeutics, hygiene; Tuesday — Medicine; Wednesday — Forensic medicine; Friday—the candidates to report on the cases of actual patients.

Second week. To commence on Monday morning at 10, by *vivâ voce* interrogation and demonstration from preparations, with translations from the Pharmacopœia.

N.B.—The candidate is required to translate passages of the Latin Pharmacopœia into English, and of the English Pharmacopœia into Latin.

The examination, as it respects anatomy, is especially searching and full; and, indeed, taking it altogether, it is an excellent test of the qualifications of the candidate, and he who passes it gives ample proof that he has studied hard and well. If there be a fault in this examination it is in the written part of it, some of the questions being too lengthy and diffuse;—for instance, as one has said, “*all about all kinds of malignant diseases,*” or “*everything respecting palsy in all its forms,*” on each of which questions volumes might be written, whilst an hour only is allowed for the work. We think it would be an improvement if the questions were more numerous and concise. A larger number of subjects could then be included in the examination, and the general knowledge of the candidate would be more certainly ascertained, and, moreover, this method might help to check *the disreputable practice of grinding*.

These long *leading* questions are talked about among candidates and students, and are inserted in medical publications and the University Kalendar, and thus they become the grinder’s stock-in-trade. For as such leading questions

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are necessarily but few, and obtain great publicity, the grinder can form a good general idea of the character of the examination by comparing the questions of different years, and hence he shapes his instruction ; and in this manner the utility of written questions as a test of the qualification of the candidates is greatly impaired.

The "*vivâ voce*" part of the examination is as practical and demonstrative as it can be made, and in it the conception of the founder of the prizes is fully realised ; for " in anatomy the dead subject is placed before the candidate ; in chemistry, botany, and pharmacy, specimens of minerals, plants, and pharmaceutical preparations are placed before him, and he is required to perform analytical operations ; and in the practice of physic and surgery, the candidate is placed before the patients in the wards of an hospital." Of course, we propose this examination, or a similar one, for all students of medicine—as the initiatory one—as *the only one*, in fact, for all who intend to practise as general practitioners.

In pursuance of the plan we marked out for ourselves at the commencement of the Essay, we have still to say a few words respecting the "*physicians*" of the age, and so to complete the task we have taken in hand.

The "physician," or "doctor," occupies the highest position in the medical profession—at least, such is the general opinion respecting him, and the most severe and desperate diseases are often committed to his care by the general practitioner and the public ; therefore, first of all, his qualifications should be thoroughly tested in the above-mentioned or any other practical way, and, what is of equal importance, he should have had a large amount of experience in his profession. But is it so ? Are all our physicians men of experience ? Nay, truly, it is a notorious fact, that often an

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aged man, who has been all his life conversant with disease and its treatment, will be required to go through the somewhat serious farce of a consultation with some youthful doctor, who "cannot distinguish between scarlet fever and measles, *but from his books.*" This is a strange procedure, sanctioned by the custom of ages; but that the general practitioner should submit to it in this day is most wonderful, for it is an insult to his understanding and experience.

A writer has lately said, "It is right that there should be grades in surgery as in medicine, but the higher grade should consist of those who, by their longer standing in the profession, or by undergoing tests of their possessing higher qualifications, have proved their title to it." Our views of the matter are well expressed by this writer; and we suggest, therefore, that medical men, whatever may have been the way in which their qualifications have been tested at first, shall be compelled to practise as general practitioners *for twelve years*, before they take the title of "doctor," or "physician," or are employed in that capacity; or, what is still more desirable, after they have been engaged in general practice for a period of twelve years, let them undergo a strict practical examination, so that their fitness for this higher office and employment may be fully tested and proved. The examination of the Royal College of Physicians, England, for persons who have attained their fortieth year; of the Royal College of Surgeons, England, for persons who have been twelve years in practice; or of the Army Medical Department, as recommended by the Royal Commission in 1858 for assistant-surgeons, before promotion to the surgeoncy, afford examples (at least theoretically) of what we mean.

Furthermore, we desire to note, with strong and earnest
reprobation,

reprobation, the undignified conduct of many physicians, so-called, whose custom it is to visit all patients who send to them, whether for medical or surgical advice, independently of the general practitioners, and by accepting the same, or nearly the same remuneration, encroach on their practice. The general practitioners, however, retaliate by having as few consultations with the physicians as possible; and so they gain little or nothing pecuniarily by their conduct, and in our judgment they lose immensely in professional credit and respectability; for the jealousy and ill-feeling which very commonly exist between these two classes of medical men may be attributed, in some measure, to this custom. Nay, is it not a frequent cause of many sad and disreputable professional quarrels? We believe that it would be a great improvement to the profession generally, if the physicians would keep a broad and well-defined line between themselves and the general practitioners, by limiting their practice exclusively to "*consultations*," which in this age seems to be their legitimate province; or, at least, by setting a higher value upon their services, as is the usage amongst the *chief and honourable men* in other professions.

Let, then, the plans just suggested be fully carried out,—and they might be, either by parliamentary enactment, or by agreement among the licensing corporations themselves,—and after a time we shall have none in the higher walks of the profession but men who have been engaged for a series of years in the daily investigation and treatment of disease. We shall have none but fully qualified and practical "physicians" or "doctors" amongst us, that the aged general practitioner will consult with pleasure to himself and probable advantage to his patients; and that the young practitioner will confide in and respect, and whose assistance

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in desperate cases he will gladly and eagerly seek ; and, finally, we shall give the honourable places and the larger emoluments of the profession to men who have hardly earned them, and to whom, therefore, they most justly belong.

In conclusion, the writer trusts he has made it evident, as he has rapidly glanced at the various subjects herein treated, that he has no sympathy with those who seem to delight in pouring contempt and abuse on the corporations, the hospitals, and the medical profession generally.

He has pointed out, as he thinks, a few things in the different departments of the profession which might be easily altered and amended ; but, despite these imperfections, he is proud to belong to it, and considers it one of the most noble callings that man can follow, or to which his attention can be directed.





Appendix.

THERE are a few other matters which we could not conveniently place in the body of the Essay, and therefore we notice them here.

I. *Medical Teaching on Insanity.*—It is strange, but yet true, that the medical schools make little or no provision for instructing the student in the detection and treatment of insanity, nor do any of the licensing bodies include the subject in their regulations. It is true there is a lunatic asylum in connexion with Marischal College and University, Aberdeen, “a limited number of students being permitted to witness the practice pursued in the asylum, and a course of clinical instruction on the treatment of insanity being given.” At St. Luke’s and Bethlehem Asylums, London, also, “a limited number of pupils are admitted to attend the practice of the physicians, and a course of lectures on insanity are annually delivered, and clinical lectures are occasionally given.” With the exception of the treatment of the subject in its turn, in the usual course of lectures on medicine, these appear to be all the efforts which are made to afford instruction on mental disease in the whole of the medical schools throughout Great Britain and Ireland.

This is a serious omission in medical education, for disorders of the intellect very frequently come under the notice of medical men in their every-day practice. Indeed, although in many cases it is well known that little can be done in the way of “ministering to a mind diseased,” the
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medical man is the person consulted, and upon him the main dependence is placed; and, moreover, to him and to him alone, are committed the power and responsibility of separating such patients from their families, and placing them in circumstances of confinement and restraint. In other words, he is expected to know and to decide, in any individual case, whether such separation and confinement be necessary or not. Now, when we consider that this decision may involve the fortunes, the prospects, and the happiness of our fellows, we see that it should not be lightly or ignorantly made. But it must be, at least, ignorantly made, if no means are used in the medical institutions to give instruction in the treatment and general management of such cases; and it is to be feared that, through the ignorance and negligence of medical men, many persons have been torn from their families and incarcerated in lunatic asylums who were never mad at all. It is a fact that some cases of this kind have come to light, from time to time; and knowing, as we do, the care that has always been taken to prevent any disclosures of the kind, it is probable the half has not been told to the world, and that even at this hour there are many miserable beings locked up in gloomy and solitary cells, who are in a fit state to have their liberty and to associate with their families and friends. There is no sadder thought than this—that men who are of sound mind, and never were otherwise, are daily and hourly mixed up with the insane, and are treated as such, where no friends come to inquire after them, and to whom no hope of escape remains. Nay, this is a most horrible thought, and if, as has been stated, under such circumstances, they become absolutely mad—mad as those around them—who can wonder? Indeed, one could almost wish for them such a termination to their miserable state, so that their consciousness of it might be annihilated. This very important matter demands the attention of our medical corporations. There are numerous asylums for the insane in Great Britain and Ireland which might easily be made
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available for instruction. In the capital of each country, especially, they should be opened to the medical student, and some months' attendance should be required of him concurrently with his ordinary hospital practice. Or, if the Government does not possess sufficient control over all lunatic asylums to open them (and probably it does not), then the county asylums for lunatic paupers might be made to answer the purposes of education, and at least three months' attendance here should form a part of the student's curriculum.

II. *Supply of Subjects for Dissection.*—The supply of subjects for dissection has generally been scanty in the English medical schools, and it does not seem to increase; for, of late, considerable excitement has been created in the medical world on account of it. In Scotland * and Ireland this is not the case; and on the Continent, and especially in the Paris medical schools, subjects are very plentiful, and the "parts" for dissection are supplied to the students at a low price. The reason of this dearth of subjects in England, is stated by a writer in one of the periodicals of the day. He says, "it is because the supply of the dissecting rooms is left to the caprice of certain undertakers, contractors for unclaimed bodies, in the different unions around London. These men, if better paid by the hospitals than by the Poor Law Guardians, are pleased to bring their subjects to the dissecting rooms. Who is at fault in this matter? Surely not the undertaker, who has a perfect right to dispose of his goods to the highest bidder. Certainly not the inspector of anatomy, who has no power over the undertakers. . . . That which we require, and must have, is an authority,

* Speaking of one of the dissecting rooms at an Edinburgh school, a friend of mine writes:—"We had, on an average, thirty bodies in the dissecting room at one time, during my years." In Ireland, because of the general poverty of the people, and the number of hospitals and eleemosynary establishments they require, the medical schools are always well supplied with the "unclaimed" dead.

authority, granted by Government, to compel Poor Law Guardians to give up to the inspector of anatomy all unclaimed subjects." The plan suggested by this writer is what is needed, not only for the supply of the metropolitan, but also of the provincial schools. All unclaimed subjects (if all are required) should be available for the purposes of dissection, so that the "parts" could be sold at a moderate price; and the diligent student, though he might be poor, instead of only "*dissecting the whole body once*," in accordance with the requirements of his *curriculum*, would be induced to dissect it again and again, and also to perform many of the operations on the dead body. Indeed, so long as this dearth of subjects continues, anatomy must be very imperfectly taught in the English medical schools; for subjects are almost daily needed, during the winter session, for the purposes of demonstration, and the use of the dissecting room. It is probable the Government will stir in the matter, if it should discover that, in the time of great extremity, some enterprising student had visited the grave-yard for his subjects. Let us hope this return to the desperate measures of darker days will not be required; but some demonstration from the whole body of students and officers connected with the various medical schools, and an earnest appeal to the House of Commons, would call the attention of our legislators to this important question, and, at no distant period, produce an efficient law to meet the case. In the meantime the students must have subjects, though they be costly. Let not the medical schools be parsimonious and grasping; for surely they may supply the dissecting rooms by *feeing* the undertakers, and outbidding the Boards of Guardians; for these gentlemen are not celebrated for making over-liberal payments to the people they employ.

III. *Expenses of Medical Education, and Fees of the different Medical Corporations for Degrees, Licenses, &c.*—The cost of attendance in London on all the lectures and hospital practice required by the Royal College of Surgeons,
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and the Society of Apothecaries, England, ranges from upwards of £60 to £100, as a few examples, furnished by the following table, will show:—

	£	s.	d.
St. George's	96	12	0
St. Bartholomew's	94	10	0
Guy's	90	0	0
University College	89	10	0
London Hospital	88	4	0
Middlesex	81	0	0
Charing Cross	75	14	0
Grosvenor-place School, and Univer- sity College	63	15	0

At the provincial medical schools, the cost of all the lectures and hospital practice required, both by the College and Hall, amounts to a trifle over £70.

The average annual expense incurred by the student at the universities in England, for tuition, residence, living, &c., is at the least from £60 to £70.*

FEES OF LICENSING CORPORATIONS.

1. Fees in England.

University of London.—First M.B. examination, £5. Second M.B. examination, £5. M.D. examination, £10.

University of Oxford.—M.B. degree, £14. M.D. degree, £40.

Royal College of Physicians.—License, £56 17s. (including stamp, £15.) Fellowship, £55 1s. (including stamp, £25.)†

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* The expenses of a medical education are greater in England than in Scotland or Ireland, but the expenses in England are by no means exorbitant; and it is the cost of living in London, rather than the student's education, which swallows up his means. He may reduce his expenditure considerably, by residing with some medical man as dispensing or occasional visiting assistant during the years he devotes to his professional studies, and for such services he will obtain board and lodging at least.

† The Stamp Duties on the Medical Licenses of the Colleges have lately been repealed.

Royal College of Surgeons.—Members, £21. Members admitted to Fellowship, £10. Certificates in Midwifery: Persons who were Fellows or Members prior to the 1st of January, 1853, £2 2s. Persons admitted Fellows or Members subsequently to the 1st of January, 1853, £3 3s. Persons possessing other diplomas or degrees, £3 3s.

Society of Apothecaries.—£10 10s. for License to practise in London. £6 6s. for License to practise in any other part of England and Wales.

2. *Fees in Scotland.*

University of Edinburgh.—M.D. degree, £25.

Royal College of Physicians.—Resident Fellowship, £130 (including stamp). Non-resident Fellowship and License, about £80 (including stamp).

Royal College of Surgeons.—License, £10.

University of Glasgow.—M.D. degree, £25 3s. (including stamp). Chirurgic Magister, £10 10s.

Marischal College and University, Aberdeen.—M.D. degree, £16 5s. M.D. degree, £26 5s. (including stamp).

University and King's College, Aberdeen.—M.B. degree, £5. M.D. degree, £21 0s. 6d. (including stamp).

Faculty of Physicians and Surgeons, Glasgow.—£10.

University of St. Andrew's.—£26 5s. (including stamp).

3. *Fees in Ireland.*

University of Dublin.—M.B. degree, £11 17s. 6d. M.D. degree, £22 (including stamp). Diploma in Surgery, £2 10s.

Queen's University.—M.D. degree, £5.

King and Queen's College of Physicians.—£45 (including stamp).

Royal College of Surgeons.—Fellowship, £26 5s. If the candidate be a Licentiate, £10 10s. Candidates for Letters Testimonial (Licentiates), £21.

Apothecaries' Hall.—License, 16s. Certificate of Apprenticeship, £5.

IV. *Parting Words to Medical Students.*—Since, young men, the preceding pages have been written especially for your benefit, the Author addresses you in his closing words. He reminds you that you have entered a profession which is noble and boundless in its labours and sympathies, and admonishes you to take heed that you do not degrade it. During your student-life let your motto be “*Excelsior*,” and vigorously and zealously press on, straining every nerve, that you may obtain an honourable place among your compeers. Give yourselves to the earnest study of a *few* (and only of a few) of the best books, that you may master great and leading principles, and to daily observation in the wards of the hospital, the dissecting-room, and the dead-house; and thus prepare for your examinations, and not by resorting to the common, but most contemptible, practice of *grinding* at the end of your course.

Let the profession of your choice be the *one study* of your lives; for though you should have a smattering of classical lore, modern languages, polite literature, &c., yet no more than a smattering of medical and surgical knowledge, small will be your chance of future success in life, and certain and bitter disappointment your portion. Then, when success has crowned the efforts of your student-days, and you enter upon the practice of your profession, your diligence and application must never flag, for the field of your labours is wide and extensive, and needs steady and unceasing cultivation. They only reap who diligently sow.

Beware of everything like affectation in your conduct; neither Abernethian rudeness, nor assumed eccentricity, nor any other attempt at effect, will take with the sturdy common-sense of this age. Give no countenance to quackery—it is hydra-headed, and its various forms cannot be enumerated; but Homœopathy, the great “delusion and snare” of the age, rears its head in the midst of all ranks of society, and has its disciples even in the profession itself. But we warn you that all argumentation on a system like this
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(if system it can be called) must be ridiculous and injurious, for its absurdity places it beyond the pale of reason, and almost beneath contempt. It is emphatically one of our fashionable delusions, and the offspring of ignorance and knavery, which, after having had its day, with others of the like class, will be abased and forgotten. If you possess a competent knowledge of your profession you can afford to laugh at *globules* and *infinitesimal doses* as you would at the foolish fancies and dreams of children.

There are two errors in legitimate practice against which we would put you on your guard ;—the one the trusting too much, and the other the trusting too little to medicines : for whilst some medical men do harm in disease with over-much medicine, others are not more to be commended, who, folding their arms, stand by, and under the pretence of leaving Nature to fight her own battles, let their patients die. You will do well to walk between these extremes, for both are dangerous. Do not, however, be dogmatic, and so cherish the idea that your mode of treating disease is the only right one, for the enlightened medical man knows that there are many ways of leading the sick to health.

As you value your reputation avoid all professional quarrels, and treat your colleagues with proper courtesy and respect, holding their reputation as dear to you as your own ; for thereby you will best serve your profession and promote your own respectability and usefulness. Finally, and above all, let the religion of Christ be your guide in your intercourse with your colleagues, your patients, and the world at large ; so will you secure a satisfactory termination to a life of honourable and useful toil.

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